

## REMARKS

Reconsideration of the application is requested in view of the above amendments and the following remarks. Claim 1 has been amended. Claims 1-33 are pending in the application. Support for the amendments to claim 1 can be found at page 7, lines 3-7 of the present specification. Changes made to claim 1 are shown in the attached "Version with Markings to Show Changes Made."

Claims 1-3 were rejected under 35 U.S.C. § 102(b) as being anticipated by Shaffer, U.S. 5,705,887. Applicants respectfully traverse this rejection.

Shaffer discloses a dried metal hydride-containing paste that is provided in a lamp to prevent overheating of the end portion of the lamp by extinguishing an arc at the end of the lamp life. A deposit 30, which is considered by the Examiner to be a means for preventing overheating that corresponds to claims 1-3, is used to release a hydrogen gas for extinction of the arc (see column 3, lines 4-7).

However, Shaffer fails to disclose a means for preventing overheating that "connects the lead wires electrically just before or after the electrode coil is disconnected," as required by claim 1. Further, Shaffer fails to disclose a means for preventing overheating that "melts at the end of a life of the fluorescent lamp and retains its molten state," as required by claim 1. The deposit 30 disclosed by Shaffer does not keep melting at the end of the lamp life. A means for preventing overheating that keeps melting at the end of the lamp life and connects the lead wires electrically, as required by claim 1, keeps the bulb-end glass safely at lower temperatures and prevents the bulb-end glass from being melted (see page 2, line 32 to page 3, line 1 of the present specification). Therefore, Applicants submit that Shaffer fails to disclose every limitation of claims 1-3. Reconsideration is respectfully requested.

Claims 4, 7, 24 and 28 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Shaffer in view of Schlitt et al., U.S. 4,495,440. Applicants respectfully traverse this rejection.

As discussed above, Shaffer fails to disclose every limitation of claim 1. Schlitt fails to remedy the deficiencies of Shaffer as it relates to claim 1. Schlitt discloses a lamp that includes an ampul 12 and an arc-extinguishing fluid 16 placed in cavity 14 of the ampul 12. The arc-extinguishing fluid 16 (e.g., a gas) is released to extinguish an arc at the end of the lamp life. To fulfill this function, the ampul 12 is mounted on a lead-in wire 60 as shown in Figure 5, or an a heat shield 54 that is electrically connected only to the lead-in wire 60 as shown in Figures 6 and

7 of Schlitt. In contrast, claim 1, requires a means for preventing overheating that includes "connecting the lead wires electrically just before or after the electrode coil is disconnected." The "means for preventing overheating" required by claim 1 is mounted between the lead wires. Therefore, claims 4, 7, 24 and 28 are allowable for at least the reason they are dependant upon an allowable base claim. Applicants do not concede the correctness of this rejection.

Further to the above, Schlitt also fails to disclose the limitations of claims 4, 7, 24 and 28. Specifically, claim 4 requires that at least one of the first and second metallic pins of the means for preventing overheating is wound around the glass member of the means for preventing overheating. The configuration of claim 4 can prevent the molten glass member from falling off of the pair of metallic pins (see page 14, lines 15-23 of the present specification). Even if the glass member falls off the metallic pins, the metallic pins come into contact with each other. Thus, in either case, the electrical conduction between the metallic pins can be maintained. As a result, the limitations of claim 4 can prevent melting of the bulb-end glass 5. In addition, the means for preventing overheating required by claim 4 clearly differs from the ampul 12 disclosed by Schlitt in both function and result. Therefore, even if Schlitt did disclose a wire 18 that is wrapped around the ampul 12, Schlitt would still fail to disclose or suggest the function and result obtained by the limitations of claim 4.

As to claim 28, Schlitt discloses in Figure 5 that the ampul 12 is mounted on the lead-in wire 60. Schlitt also discloses in Figures 6 and 7 the ampul 12 mounted on the heat shield 54 such that the ampul 12 is electrically connected only to the lead-in wire 60. Therefore, contrary to the Examiner's contention that Schlitt discloses in Figures 5-7 that the electrical conduction is continued after the electrode coil is disconnected, the ampul cannot connect the lead-in wires 58, 60 electrically after the wire 52 is disconnected. Therefore, Schlitt fails to disclose the limitations of claim 28.

Claim 30 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Shaffer in view of Boyce et al., U.S. 5,923,121. Applicants respectfully traverse this rejection.

Shaffer fails to disclose every limitation of claim 1, from which claim 30 depends. Boyce fails to remedy the deficiencies of Shaffer as it relates to claim 1. Boyce discloses a mercury-sealed capsule 8 that is mounted at the end of a lead-in conductor 16. The capsule 8 is used to fill a lamp with a mercury gas in a manufacturing process of the lamp and therefore

performs its function continuously during the life of the lamp. In contrast, the means for preventing overheating of claim 1 operates at the end of the lamp life.

Boyce also fails to disclose or suggest the limitations of claim 30. Claim 30 requires that "the means for preventing overheating is located closer to the electrode coil than to the bulb-end glass." Thus, when the electrode coil is disconnected, the glass member in the means for preventing overheating can be melted faster than the bulb-end glass (see page 8, lines 7-11 of the present specification). The means for preventing overheating required by claim 30 is neither taught nor suggested by the capsule 8 disclosed by Boyce in either function or result. Therefore, even if Boyce disclosed that the capsule 8 is mounted at the end of lead-in conductor 16, it is not possible to generate the configuration of claim 30, nor is there a motivation to combine the disclosure of Boyce with Shaffer to produce the limitations of claim 30. Thus, neither Shaffer, Boyce, nor a combination of these references disclose or suggest every limitation of claim 30.

In view of the above, Applicants request reconsideration of the application in the form of a Notice of Allowance.



Date: December 23, 2002

Respectfully submitted,

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Serial No. 09/762,367

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Claims

Claim 1 has been amended as follows:

1. (Once Amended) A fluorescent lamp comprising:

a bulb provided with a pair of electrode coils at both ends thereof, each of the electrode coils mounted between two lead wires held by a bulb-end glass,

wherein a means for preventing overheating of the bulb-end glass is mounted between the lead wires located between the electrode coil and the bulb-end glass, the means for preventing overheating connects the lead wires electrically just before or after the electrode coil is disconnected, and the means for preventing overheating melts at the end of a life of the fluorescent lamp and retains its molten state.

